

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared DEBRA ARON, who being by me first duly sworn depose and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II - Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Rebuttal testimony consisting of 43 pages and 3 exhibits.

Debra Aron

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 3rd DAY OF MARCH, 2004

Micheale F. Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 2, 2005

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BELLSOUTH TELECOMMUNICATIONS, INC.

BEFORE THE

ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 Phase II

REBUTTAL TESTIMONY OF

DR. DEBRA J. ARON

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND POSITION.

A. My name is Debra J. Aron. I am the Director of the Evanston office of LECG, and Adjunct Associate Professor at Northwestern University. My business address is 1603 Orrington Avenue, Suite 1500, Evanston, IL, 60201.

Q. ARE YOU THE SAME DEBRA J. ARON WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

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1 A. My rebuttal testimony responds to the economic arguments made by Dr. Mark T.
2 Bryant on behalf of MCI, Mr. Steven E. Turner on behalf of AT&T, Mr. Don J.
3 Wood, also on behalf of AT&T, and Mr. Joseph Gillan on behalf of CompSouth. I
4 am also submitting a revised Exhibit DJA-02, which reflects refinements to
5 distances between the wire centers and the access tandem, and lists all markets that
6 pass the potential deployment analysis. The changes are also reflected in revised
7 Exhibit DJA-08, which I will submit shortly. I am also submitting a revised
8 Exhibit DJA-07. I inadvertently filed an exhibit showing business customer
9 acquisition costs (DJA-07) that used Florida data (although the BACE runs
10 themselves used the Alabama data). I am resubmitting the exhibit with the
11 Alabama data, as were used in the BACE runs.

12
13 **Q. ALL PARTIES HAVE DIRECTED THIS COMMISSION TO VARIOUS**
14 **PORTIONS OF THE TRO AND TO THE RULES IN SUPPORT OF THEIR**
15 **POSITIONS IN THEIR DIRECT TESTIMONY. WHAT IMPACT DOES**
16 **THE D.C. CIRCUIT COURT’S ORDER HAVE ON THE USE OF THE TRO**
17 **IN THIS PROCEEDING?**

18
19 A. I’m not a lawyer, but it appears to me that the impact of the Court’s opinion on the
20 TRO and the rules is unclear. At the time of filing this testimony, my
21 understanding is that the Court had vacated large portions of the rules in the TRO,
22 but stayed the effective date of the opinion for at least sixty days. I understand that
23 the TRO remains intact for now, but that the TRO and the rules must be viewed

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1 warily, especially in light of the Court’s harsh condemnation of large portions of
2 the TRO. Accordingly, I would like to reserve the right to supplement my
3 testimony, as circumstances dictate, and as the situation becomes clearer.

4
5 **II. RESPONSE TO DR. BRYANT**

6
7 **Q. PLEASE COMMENT ON DR. BRYANT’S ARGUMENT THAT THE**
8 **SOCIAL COSTS OF FINDING NO IMPAIRMENT WHERE IMPAIRMENT**
9 **EXISTS ARE GREATER THAN THE COSTS OF FINDING IMPAIRMENT**
10 **WHERE NO IMPAIRMENT EXISTS. (BRYANT DIRECT 20-21.)**

11
12 A. This is an unsupported and, in my opinion, seriously misguided conjecture on the
13 part of Dr. Bryant. Mr. Gillan makes similar arguments, so my comments here will
14 apply to his testimony as well. The asymmetry between the effects of the two
15 potential types of errors recited by Dr. Bryant is of a different type than claimed by
16 Dr. Bryant. The asymmetry is in the *observability of the outcomes*. If the Alabama
17 Public Service Commission (“APSC” or “Commission”) errs in finding impairment
18 where none exists, the social costs are extremely difficult to measure, because the
19 nature of the social cost is in the lost investment, innovation, and economic
20 development that would have been forthcoming but remains unknown and
21 unobserved. This, however, does not make these losses any less real nor less
22 significant. In contrast, if the APSC errs in finding no impairment where
23 impairment exists, the social cost is merely the foregone entry of carriers who

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would, in any event, rely entirely on the network of the incumbent (what the D.C. Court of Appeals, in *USTA v. FCC*, referred to as “synthetic” competition). The social cost, therefore, is likely to be relatively low, while the observed effect—that there will be fewer visible “competitors” in the market—would be relatively apparent. Hence, while the asymmetry of social costs would, if anything, favor erring on the side of finding no impairment, the political pressure clearly favors a finding of impairment. Regulatory authorities should resist the temptation to succumb to short run incentives to behave myopically for purposes of preserving the *perception* of competition, and instead seek to engage in decision making that maximizes social welfare and will encourage *true* competition. By law, carriers are entitled to unbundled local switching where impairment exists, but this entitlement should not be confused with the social-welfare benefits of promoting facilities-based competition where such competition can be economic.

Q. PLEASE ELABORATE ON THE SOCIAL WELFARE COSTS OF AN ERRONEOUS FINDING OF IMPAIRMENT.

A. The FCC recognized that unbundling is “one of the most intrusive forms of economic regulation—and one of the most difficult to administer.” (TRO ¶ 141.) This intrusive form of regulation diminishes the incentives for the facility owner to keep up or improve the property, as it must share the benefits of those investments with its competitors. (Breyer *Iowa Utilities*, TRO ¶ 64.) It also can damage the incentives of CLECs to invest in network infrastructure. There are, as well,

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1 significant administrative and social costs of managing a shared resource. (TRO ¶
2 64.) Facilities-based competition reduces the need for administrative oversight and
3 regulation and therefore better serves the Act's goal of reduced regulation.

4
5 Facilities-based competition also better serves the Act's goal of innovation. UNE-
6 P-based CLECs are restricted in their ability to innovate because they cannot
7 innovate along the dimensions (that is, facilities) that are owned or controlled by
8 the ILEC. In addition, the FCC found that facilities-based competition creates
9 redundancy, which increases reliability and enhances national security. (TRO fn.
10 233.)

11
12 As noted by FCC Chairman Michael Powell in his Separate Statement to the TRO,
13 facilities-based competitors can offer differentiated service, they can control more
14 of their own costs thereby offering consumers real potential for lower prices, they
15 are less dependent on the incumbent, and they provide vital redundancy of
16 networks. (TRO Powell Separate Statement, page 3.) It is for these reasons, and
17 perhaps others, that the FCC "disagree[s] that duplication of facilities is necessarily
18 'wasteful'" (TRO fn. 233.) and that "we disagree with commenters that argue that
19 the Act contains a 'statutory mandate of equal treatment for all three options.'" (TRO fn. 233.) It is also for these reasons that the Congress did not create a
20 general unbundling obligation, but instead provided a limitation in the form of the
21 Section 251 requirements.
22
23

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1 **Q. DOES DR. BRYANT MISSTATE THE EFFECTS OF A FINDING OF NON-**
2 **IMPAIRMENT WHEN HE CLAIMS THAT “UNE-P COMPETITION WILL**
3 **BE TERMINATED, AND ALL CONSUMERS CURRENTLY SERVED BY**
4 **UNE-P CLECS WILL BE FORCED TO MAKE A CHANGE IN THEIR**
5 **TELEPHONE SERVICE: EITHER SWITCHING BACK TO THE ILEC,**
6 **SWITCHING TO A UNE-L CLEC, OR SWITCHING TO THEIR**
7 **EXISTING CLEC’S NEW UNE-L FACILITIES”?** (BRYANT DIRECT 16.)

8
9 **A.** Yes, this is an erroneous statement for several reasons. A finding of “non-
10 impairment” does not necessarily terminate UNE-P competition, but rather
11 terminates (over time) the ILEC’s obligation to provide unbundled local switching
12 at regulated prices. Incumbent carriers may continue to provide unbundled local
13 switching on commercially agreeable terms, as determined by the actions of the
14 marketplace. Moreover, a finding of non-impairment does not terminate
15 competition, but rather shifts the focus of competition to UNE-L and bypass
16 competition, which, as I discussed, and as the FCC agrees, provides for the
17 potential of a more robust and vigorous form of competition than can UNE-P.
18 Finally, a finding of non-impairment does not immediately “terminate” UNE-P, it
19 merely begins a gradual phase-out process.

20
21 In addition, it is simply not true that the gradual switch from UNE-P to UNE-L in
22 areas where there is no impairment “forces” consumers to make a change in their
23 telephone service. The transition of customers from UNE-P to UNE-L is a service

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1 provider issue, not a consumer issue. Switching the service platform from the
2 ILEC's switch to the CLEC's does not require the consumer to make any change at
3 all. Certainly, there would be no injury to the CLEC's customer due to being
4 served by the CLEC's switch rather than that of the ILEC.

5
6 Dr. Bryant may be envisioning instances in which a CLEC would rather exit the
7 market than pursue the UNE-L opportunity. This is, of course, a possibility,
8 particularly for CLECs with no particular comparative advantage or expertise with
9 the deployment of actual telephone network facilities. Where CLECs are
10 unimpaired, however, the exit of particular carriers who cannot survive if required
11 to compete without regulatory favor creates opportunities for those who can. It
12 would be poor public policy to perpetuate a defective regulatory policy (mandated
13 unbundling where CLECs are not impaired) simply to sustain an artificial market
14 structure.

15
16 **Q. DR. BRYANT ARGUES THAT CLECS "HAVE MUCH TO GAIN BY**
17 **LIMITING THEIR DEPENDENCE UPON THE INCUMBENT." (BRYANT**
18 **DIRECT 22.) PLEASE COMMENT.**

19
20 **A.** Dr. Bryant ignores the fact that CLECs have much to gain by depending on an
21 incumbent that remains under the firm grip of regulation. A CLEC that has
22 available to it UNE-P at regulated prices can defer making investments by using
23 UNE-P even when there would be no impairment without it. Thus, rather than

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1 actually investing in bringing new, facilities-based technologies to the market
2 place, UNE-P permits CLECs to defer investment in infrastructure. While such an
3 approach may benefit the individual CLEC business plan, it delays the benefits that
4 new technology brings to consumers.

5

6 **Q. DR. BRYANT CLAIMS THAT THE ACT “DOES NOT GIVE**
7 **PREFERENCE” TO THE THREE TYPES OF ENTRY VEHICLES**
8 **(RESALE, UNE-BASED, AND FACILITIES-BASED) FOR WHICH IT**
9 **PROVIDES. (BRYANT DIRECT 23.) IS THIS CORRECT?**

10

11 A. No. In fact, that is not the issue. While one can argue that the law is agnostic
12 about which form of entry a particular CLEC chooses, the law is perfectly clear that
13 where CLECs are not impaired without access to any given unbundled network
14 element, unbundling that network element is not required. Hence, where CLECs
15 are not impaired without access to unbundled local switching, for example, the Act
16 strictly disfavors—i.e., precludes—UNE-P based entry. This Commission is not
17 being asked to make an impairment decision *despite* the Act’s alleged neutrality
18 over different entry vehicles, but precisely *because* the Act strictly favors facilities-
19 based entry (or resale) where there is no impairment, to the point of requiring it.
20 The Act’s philosophy in that regard is the foundation of this proceeding.

21

22 **Q. DR. BRYANT CLAIMS THAT THERE IS AN INCONSISTENCY IN**
23 **BELLSOUTH’S POSITION, IN LIGHT OF THE ALLEGED FACT THAT**

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1 ILECS ARE NOT BUILDING THEIR OWN LONG DISTANCE
2 NETWORKS. (BRYANT DIRECT 24.) IS THERE AN INCONSISTENCY?
3

4 A. No, for two reasons. First, wholesale long-distance service is not an unbundled
5 network element. Long-distance carriers need not offer wholesale service, nor
6 must they price it at TELRIC if they do offer it. Similarly, it may be the case that
7 in markets where CLECs are not impaired without access to unbundled local
8 switching, ILECs nevertheless may provide switching at market-determined prices,
9 just as some long-distance carriers provide wholesale long-haul services at market-
10 determined prices. Thus, a finding of no impairment actually introduces
11 consistency for the use of local and long distance networks—both will be priced
12 according to market forces.
13

14 Second, ILECs are in fact bringing new long distance capacity to the market, to the
15 extent that they are not leasing capacity from the big three incumbents, but rather
16 leasing capacity from newcomer wholesale providers such as Williams
17 Communications.
18

19 Q. DOES DR. BRYANT OFFER AN ANALYTICAL TOOL TO AESS
20 IMPAIRMENT? (BRYANT DIRECT 1-2.)
21

22 A. Dr. Bryant sponsors a model, or “analytical tool,” upon which he relies to make
23 recommendations to the Commission as to the geographic markets in which he

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believes CLECs are impaired without access to unbundled local switching. His model, however, is flawed in a number of critical respects, rendering his conclusions irrelevant to an assessment of impairment.

Q. DR. ARON, FROM YOUR PERSPECTIVE AS AN ECONOMIST, PLEASE DESCRIBE THE PROBLEMS WITH DR. BRYANT'S ANALYTICAL MODEL.

A. First, Dr. Bryant's uses an improper framework for analyzing potential deployment and therefore impairment. Moreover, even within the context of the analysis itself, Dr. Bryant makes several assumptions that do not reflect the potential of a reasonably efficient CLEC. In particular, based on the extensive research I have performed on these issues, I conclude that Dr. Bryant's assumptions regarding prices, customer acquisition costs, churn, bad debt, DSL penetration, and DSL prices do not reflect the opportunities available to an efficient CLEC.

Q. WHAT DO YOU MEAN WHEN YOU SAY THAT DR. BRYANT'S ANALYSIS USES "AN IMPROPER FRAMEWORK"?

A. The FCC explains in great detail what it believes is the economically appropriate framework for evaluating potential deployment of a reasonably efficient CLEC. The FCC is clear that an impairment analysis should be based on a business case analysis ("[S]tates should perform a business case analysis of providing local

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1 exchange service” (TRO fn.1581)). Based on my many years of experience as a
2 business school professor, as well as my general knowledge as a professional
3 economist, I can say that a proper and standard business case analysis for a startup
4 firm would model the costs and revenues per period (typically, per year) over
5 several years and then calculate the discounted present value of the cost and
6 revenue flows. Explicitly modeling the business over a period of time is important
7 in modeling new entry in particular, because entry typically requires start-up costs
8 that are incurred right away but only recovered over time. That is, revenues tend to
9 increase over time, so that there is a mismatch between the timing of revenues and
10 the timing of costs. If one fails to model the costs and revenues over time, one
11 cannot readily capture the fact that many costs are incurred immediately, but
12 revenues that may justify those costs may start small and increase over time. A
13 static model that, for example, considers only the first year or two of operation
14 would tend to overstate costs and understate revenues, concluding that the
15 enterprise is not profitable, when in fact it may be if the discounted present value of
16 future revenues and costs are accounted for. Dr. Bryant admitted in discovery in
17 Florida that a company’s business plan can have negative net revenue in the early
18 years and nevertheless have a positive net present value (“NPV”) over a specified
19 period of time. (See MCI Response to BellSouth Florida Interrogatory 3-150.)
20 Alternatively, a model that compares only the long run “steady state” costs and
21 revenues would tend to ignore the up-front costs of entry. A proper business case
22 analysis accounts for all these effects by explicitly modeling the costs and revenues
23 over time and calculating a discounted present value of the firm. A snapshot or

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1 static business model that considers only a single (or “typical”) period of costs and
2 revenues is not likely to be a valid and robust business case from which reliable
3 conclusions can be drawn.

4
5 The approach adopted by Dr. Bryant suffers from this fundamental structural
6 defect. Dr. Bryant’s impairment tool is based on a model developed by the
7 National Regulatory Research Institute (“NRRI”). The NRRI model is a single-
8 period or static spreadsheet that appends revenue estimates to an annualized costing
9 model. Dr. Bryant admitted in discovery that he did not perform a time series
10 analysis with respect to the use of his impairment tool. (MCI Response to
11 BellSouth Florida Interrogatory 3-163.) This approach therefore fails to conform to
12 the business case (net present value) methodology that would properly assess the
13 viability of a business and that the FCC unequivocally requires. It would therefore
14 be inappropriate to use Dr. Bryant’s model to decide issues raised by the TRO.

15
16 **Q. ARE YOU AWARE OF ANY OTHER STRUCTURAL DEFECTS WITH**
17 **DR. BRYANT’S MODEL?**

18
19 A. Yes. Dr. Bryant’s model ignores the ability of the CLEC to serve medium and
20 large business customers. (See MCI Response to BellSouth Florida Interrogatory
21 3-175) Ignoring this market segment violates the principles of sound business case
22 analysis, and is contrary to the explicit guidance provided by the FCC (“The state
23 must also consider the revenues a competitor is likely to obtain from using its

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1 facilities for providing data and long distance services and from serving business
2 customers” (TRO ¶ 519)). It is contrary to the principles of sound business case
3 analysis because the ability of a CLEC to serve the enterprise market affects its
4 ability to share the costs of a switch, transport, collocation and other items across
5 market segments. As the FCC observes, this potential to share costs is a form of
6 scale economies (considering revenues from business customers “will therefore
7 take into account the scale and scope economies available to carriers using existing
8 facilities to provide a variety of services to all customers that are likely to be served
9 by an efficient entrant.” (TRO fn. 1585)). A rational CLEC will consider the
10 ability to leverage these potential scale economies as part of its business case
11 analysis. While it may not be economic for a CLEC to invest in a switch to serve
12 only the enterprise and small business market, it may well be economic to invest in
13 a switch to serve these customer segments along with the enterprise market. The
14 correct standard for assessing whether it is economic to serve the mass market via
15 UNE-L is to determine whether serving the mass market provides positive NPV to
16 a hypothetical CLEC that also has the possibility of serving the enterprise market.
17 Ignoring this possibility deprives the CLEC of legitimate scale economies and
18 could therefore lead to a conclusion of impairment when there is no impairment.
19 This further reinforces my conclusion that Dr. Bryant’s modeling approach fails to
20 meet the FCC’s standards and so its results can be given no weight in determining
21 impairment.

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1 **Q. ARE THERE ANY OTHER ASPECTS OF DR. BRYANT’S MODEL ON**
2 **WHICH YOU CAN COMMENT?**

3
4 A. Yes. It is clear that Dr. Bryant has offered unsupported and unreasonable inputs
5 that drive his results. These include his inputs for revenues, penetration, bad debt,
6 customer acquisition costs, and customer churn.

7
8 **Q. DR. BRYANT BEGINS HIS DISCUSSION OF THE “PROCESS [HE USED]**
9 **TO ESTIMATE REVENUE” RELEVANT TO A CLEC CONSIDERING**
10 **POTENTIAL DEPLOYMENT WITH ASSERTIONS THAT FUTURE**
11 **REVENUES WILL FOLLOW A DECLINING PATH OVER TIME.**
12 **(BRYANT DIRECT 77-79.) WHAT IS THE RELEVANCE OF THIS**
13 **DISCUSSION?**

14
15 A. There is none, insofar as Dr. Bryant clarified in discovery (in Florida) that he does
16 not use these estimates. (See MCI Response to BellSouth Florida Interrogatory 3-
17 145.) However, I will describe the inconsistencies and flaws in his approach
18 because in his testimony, Dr. Bryant claims that prices may decrease by 11 to 20
19 percent over time. (Bryant Direct 84.)

20
21 Dr. Bryant says that he begins his revenue analysis with the ILEC’s existing rates.
22 (Bryant Direct 79.) He then claims that prices will decline 11 to 20 percent from
23 that level over time as a result of competition. (Bryant Direct 84.) This conclusion

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1 is deficient in a number of respects, but the main deficiency is that it violates the
2 requirements of the FCC’s potential deployment analysis. The FCC requires that
3 states evaluate potential deployment business cases *using the existing level of*
4 *prices and revenues*. The FCC concludes that it “expect[s] states to consider prices
5 and revenues prevailing at the time of their analyses.” (TRO fn. 1588.) The FCC
6 thereby concludes that existing prices and revenues are reasonable proxies for
7 likely prices and revenues after competitive entry and will result in a more
8 administrable standard.

9
10 **Q. PLEASE DESCRIBE ANY OTHER DEFICIENCIES WITH DR. BRYANT’S**
11 **ANALYSIS OF PROJECTED PRICE TRENDS.**

12
13 A. Dr. Bryant produced his analysis in discovery (in Florida). Upon review of that
14 document, I note that his analysis, while ignoring any potential for innovation that
15 could increase demand or provide new services (and other deficiencies), he
16 assumes that CLECs will, in aggregate, achieve *over a 21 percent market share in*
17 *the first year*, and achieve *over 47 percent of the market by year ten*. (MCI
18 Response to BellSouth Florida Interrogatory 3-144, page 12.) In contrast, Dr.
19 Bryant claims that his impairment model will assume that an efficient CLEC will
20 have a market share of 5 percent. (Bryant Direct 87.) If Dr. Bryant believes that an
21 efficient CLEC could not achieve a market share above 5 percent, it is
22 disingenuous to quote results to the APSC about price trends that he predicts only
23 on the assumption that CLECs will capture nearly half the market.

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1

2 **Q. IF DR. BRYANT DOES NOT INCORPORATE THE PRICE TREND**
3 **ASSUMPTIONS INTO HIS MODEL, WHAT IS THE BASIS FOR HIS**
4 **REVENUE ASSUMPTIONS?**

5

6 A. Dr. Bryant claims that his model uses data on residential revenue that he obtained
7 from TNS Telecoms that is based on subscriber surveys. (Bryant Direct 88.) He
8 also says that his business revenue is “based on the calculation of the differential
9 between the bundled price for residential and business services sold by MCI in
10 Alabama.” (Bryant Direct 88.)

11

12 **Q. PLEASE COMMENT ON THE USE OF THE SURVEY DATA AS A**
13 **BENCHMARK FOR DR. BRYANT’S PRICE ASSUMPTION. (BRYANT**
14 **DIRECT 88.)**

15

16 A. Dr. Bryant claims that he uses the average spending per household for each wire
17 center. Although he does not identify these amounts, in his model he uses, on
18 average, ***[REDACTED]*** for residence and ***[REDACTED]*** for businesses. In my
19 direct testimony, I demonstrated that CLECs currently cream skim the better
20 customers primarily by avoiding the lowest spend residential quintile and the
21 lowest spend SOHO tercile. Avoiding the lowest spend categories can
22 substantially increase the average spend of those actually served by the CLEC.
23 (For example, if terciles produce average spending levels of \$10, \$40, and \$70, the

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1 average overall spending level is \$40, but the average of the top two terciles (i.e.,
2 eliminating the lowest tercile) is about a third higher: \$55.) Second, and somewhat
3 related, is that the averages produced by the bill harvest survey may not reflect
4 what CLECs are charging, or what an efficient CLEC may charge, but instead, may
5 reflect average spend of an ILEC customer. I have found Dr. Bryant's TNS
6 Telecoms data to be biased low in Florida and Georgia.

7
8 In fact, this appears to be the case here, since Dr. Bryant's estimate is shown to be
9 deficient by MCI's own data submitted in discovery. In responding to Bellsouth's
10 Request for Information No. 1-26 in Alabama, MCI claimed that its "Integrated"
11 residential per-customer revenue for "qualifying" service in Alabama was
12 *** [REDACTED] ***. This is
13 *** [REDACTED] *** the residential per-customer revenue
14 figure used by Dr. Bryant, and the "Integrated" figure is *** [REDACTED] *** the
15 business per-customer revenue figure used by Dr. Bryant. While MCI's own
16 revenue numbers are not determinative of the revenue potential of an efficient
17 CLEC, it is unreasonable to suppose that the efficient CLEC, executing the most
18 efficient business model, would not be able to at least replicate MCI's experience.
19 This demonstrates that Dr. Bryant's figure cannot be that of an efficient CLEC,
20 executing the most efficient business model, and using the advantages available to
21 it, as the TRO requires.
22

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1 **Q. DOES THE BACE MODEL USE THE ILEC’S EXISTING LEVEL OF**
2 **PRICES AND REVENUES?**

3
4 A. No, it adjusts them downward. The BACE model uses the ILEC’s prices as a
5 “starting point,” as advocated by Dr. Bryant, (Bryant Direct 79) and then the BACE
6 model assumes that when CLEC customers purchase services *à la carte*, they pay
7 90 percent (i.e., a 10 percent discount from the ILEC prices) for the local services
8 of what they would pay if purchasing the same services from the ILEC. This
9 adjustment is not applied as a price trend, but as a once-and-for-all (constant in
10 each period) 10 percent cut. Hence, the BACE model incorporates a “CLEC
11 discount” from ILEC rates. For bundled services, the BACE model assumes that
12 CLECs offer a number of bundle types, the prices of which are based on the actual
13 prices of the relevant bundles actually offered by CLECs in Alabama. The model
14 assumes, consistent with the direction provided by the FCC, that these prices do not
15 change over time.

16
17 **Q. WHAT DOES DR. BRYANT ASSUME ABOUT CUSTOMER**
18 **ACQUISITION COSTS? (BRYANT DIRECT 88.)**

19
20 A. Dr. Bryant assumes that the efficient CLEC will spend \$130 per line to acquire a
21 customer, whether that is a residential or business customer.

22

1 **Q. WHAT EVIDENCE DOES DR. BRYANT PROVIDE IN SUPPORT OF THIS**
2 **ASSUMPTION?**

3
4 A. Dr. Bryant himself presents no justification in his testimony. (Bryant Direct 88.)
5 However, in response to BellSouth's Florida Interrogatory 3-153, Dr. Bryant
6 simply offers that this is "the default value used by Dr. Gabel in the NRRI model."
7
8 I would like to have the opportunity to determine how Dr. Gabel arrived at his
9 figure, because it is not evident based on the response provided to Florida
10 Interrogatory 3-153. The figures presented in this response include, first, a CLEC
11 (Z-Tel) whose customer acquisition costs are claimed to be between \$80 and \$100.
12 This experience is some \$30 to \$50 less than the \$130 used by Dr. Gabel (and,
13 derivatively, by Dr. Bryant). Dr. Bryant does not explain whether or how he
14 incorporates that experience into his estimate. I will note, however, that my
15 recommendation (\$95 for residential customers) is in the range of costs estimated
16 for Z-Tel that Dr. Bryant claims in his discovery response. If an *actual* CLEC can
17 attain these levels, it would seem that this is an important datum regarding what an
18 *efficient* CLEC might attain. I am also aware that Z-Tel's Chief Executive Officer,
19 Gregory Smith, estimated Z-Tel's fourth quarter 2001 customer acquisition costs to
20 be about \$60 per gross addition. I have added this additional information to Exhibit
21 DJA-06.

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1 The figures presented by Dr. Bryant in response to discovery also include the
2 customer acquisition costs of a cable-TV company that offers voice telephony in
3 some areas of the country and several examples of wireless service providers.

4 However, Dr. Bryant does not demonstrate how he derives his recommended \$130
5 from any figure, or combination of figures, in the response, or how one might
6 adjust the wireless (and possibly cable TV) figures to account for interindustry
7 differences, such as the fact that many wireless carriers provide and program the
8 handset “free” to new customers, or that they sign up customers to term contracts
9 (and therefore can justify spending more to acquire customers).

10

11 **Q. HOLDING ASIDE THE FACT THAT DR. BRYANT’S CUSTOMER**
12 **ACQUISITION COST ESTIMATE IS UNSUPPORTED, IS HIS**
13 **ASSUMPTION NEVERTHELESS A REASONABLE ONE?**

14

15 A. No, it is unreasonably high for a residential line according to the data I have seen.
16 As I explained and fully documented in my direct testimony, several CLECs have
17 reported customer acquisition costs far below the number advocated by Dr. Bryant,
18 and I have seen no published estimates that reach the \$130 level. For example,
19 Talk America, a CLEC that markets primarily to mass-market customers, is
20 estimated to spend on the order of \$80 per customer acquisition. (See Vik Grover,
21 “Raising Numbers Again,” Kaufman Bros. Equity Research (KBRO Kaufman
22 Bros. L.P.), April 30, 2003, p. 1. See, also, Excerpt from The Wall Street
23 Transcript, “Company Interview: Gabriel Battista, Talk America Holdings, Inc.”

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1 May 2003, p. 5.) Management at Z-Tel, another CLEC that markets primarily to
2 mass-market customers, claims that it is trying to reduce customer acquisition costs
3 to \$50. (See James J. Linnehan, “Z-Tel Technologies, Inc.: Still Chugging Along,”
4 Thomas Weisel Partners Merchant Banking, August 13, 2001, p. 3.) While Z-Tel’s
5 customer acquisition costs have been estimated to be higher, the most recent
6 estimate that I have seen is from Z-Tel itself. Gregory Smith, Z-Tel’s Chairman
7 and Chief Executive Officer, said that Z-Tel’s customer acquisition costs are
8 trending down and, as of the fourth quarter of 2001, were \$60 per gross addition.
9 (Gregory Smith, CEO and Chairman of Z-Tel, Transcript by Fair Disclosure
10 Financial Network, February 28, 2002, p. 5.) For sake of completeness, I have
11 added this and other information regarding Z-Tel’s customer acquisition costs to
12 my Exhibit DJA-06, which I am updating.

13
14 Indeed, according to Banc of America Securities, even AT&T’s customer
15 acquisition costs are somewhat less than Dr. Bryant’s estimate, and are expected to
16 drop 50 percent over the next five years. (David W. Barden, “AT&T Corporation:
17 A Case for Consumer Services,” Banc of America Securities—United States Equity
18 Research, April 30, 2003, pp. 17, 20.) That same Banc of America report also
19 notes that wireless churn is on the order of 2.6 percent per month, which implies
20 that the average customer stays with the wireless company for about 27 months, not
21 the 12 months that Dr. Bryant assumes for his CLEC. None of these estimates for
22 actual CLECs exceeds or even meets Dr. Bryant’s recommendation for an efficient
23 CLEC.

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1
2 Finally, as I discussed in my direct testimony, the experiences of actual CLECs
3 may not be indicative of what an efficient CLEC could accomplish. I described
4 that UNE-P-based firms have the incentive to spend inefficiently high amounts to
5 acquire customers. The reason is that having UNE-P available where there is no
6 impairment provides CLECs with an opportunity to save on network investments,
7 but these savings are dissipated in competition for new customers. The bottom line
8 is that an estimate of customer acquisition costs, such as Dr. Bryant's, that exceeds
9 the customer acquisition costs observed for UNE-P-based firms is, in and of itself,
10 evidence of the unreasonableness of the estimate for an efficient UNE-L-based
11 CLEC.

12
13 **Q. PLEASE COMMENT ON DR. BRYANT'S ESTIMATE OF "CHURN."**

14
15 A. In his testimony, Dr. Bryant says, "customer life is twelve months." (Bryant Direct
16 88.) Dr. Bryant also claims to evaluate the impact on impairment of using different
17 customer lives between 8 and 16 months.

18
19 I have several comments about Dr. Bryant's churn assumption. First, I find it
20 entirely implausible on its face that an efficient CLEC would spend \$130 per line to
21 acquire a customer that is expected to stay with the CLEC for only 12 months.
22 Such a CLEC would have to collect nearly \$11 per month just to recover its
23 customer acquisition costs from its customers. In contrast, for example, Talk

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1 America, a UNE-P-based CLEC that serves the mass market, had monthly churn
2 estimated at 4.1 percent (which implies that at the end of about 17 months, the
3 CLEC will have lost about half of the customers that the CLEC had signed up at
4 the beginning of that period) and customer acquisition costs of \$80. (Vik Grover,
5 “Talk America Holdings, Inc, Kaufman Brothers, April 30, 2003, p. 1.) This
6 means that Talk America would have to collect approximately \$4.70 per month
7 over the life of its average customer to recoup its customer acquisition costs, or less
8 than half of the monthly necessary recoupment implied by Dr. Bryant’s churn and
9 customer acquisition cost proposals.

10
11 Dr. Bryant argues that his assumption is based on the “recent experience of MCI”
12 (Bryant Direct 88) and in discovery in Florida, he claims that this assumption is
13 based on undocumented “interviews with MCI personnel.” (MCI Response to
14 BellSouth Florida Interrogatory 3-153 E.) Of course, even aside from the lack of
15 documentation for this assumption, MCI cannot be the relevant standard because
16 no effort has been made to demonstrate that MCI represents an efficient CLEC.
17 Moreover, MCI’s “recent experience” is not likely to reflect a long run equilibrium
18 level of churn (as opposed to a start-up level of churn). This is particularly
19 important because the NRRI model that Dr. Bryant claims to use is a one-period
20 “static” model, so his churn level is presumably expected to apply in a long-run
21 equilibrium, not for the initial experience of a relatively new entrant in to the
22 market.

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1 Second, Dr. Bryant's estimate of churn also suffers from insufficient granularity.
2 Dr. Bryant assumes that all types of customers will have the same average tenure
3 with the CLEC. As the FCC noted in its TRO, business customers are less averse
4 to signing term contracts (TRO ¶ 452), so although my 4 percent per month churn
5 rate is reasonable for residential customers, one would expect that business
6 customers would have lower churn rates. In light of the availability of contracting,
7 especially for business customers, it is unreasonable to assume that the entire
8 customer base of an efficient CLEC would turn over its entire base of customers
9 every 12 months.

10
11 Finally, as I noted, Dr. Bryant claims that this assumption is based on his
12 undocumented "interviews" of MCI personnel. While the specific results of a
13 particular CLEC's business likely do not reflect the potential of an efficient CLEC,
14 it nevertheless appears self-serving that Dr. Bryant relied on MCI for churn, but
15 that he did not rely on MCI for other input items such as revenues. Moreover, in
16 BellSouth Florida Interrogatory 3-160, Dr. Bryant was given the opportunity to
17 explain why he chose Dr. Gabel's cost estimates in some instances and why he
18 interviewed MCI personnel in other instances, but he offered no explanation.

19
20 **Q. PLEASE COMMENT ON DR. BRYANT'S ASSUMPTION REGARDING**
21 **BAD DEBT.**
22

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1 A. Dr. Bryant assumes that the efficient CLEC will experience bad debt of 5 percent
2 of revenue (based, as I noted, entirely on undocumented “interviews” with MCI
3 personnel). (MCI Response to BellSouth Florida Interrogatory 3-157.) This
4 proportion is some 3 *times* the average historical bad debt experience of the RBOCs
5 and is not representative of what one might reasonably expect an efficient CLEC to
6 experience.

7

8 Managing bad debt is important because failure to pay for service exerts a double
9 whammy: it is both a loss of revenues that falls to the bottom line, and it implies
10 that the CLEC incurred costs to provide service that was never paid for. Thus, it is
11 very important for firms to manage bad debt, and it is unreasonable to incorporate
12 as part of an “impairment” analysis the assumption that a CLEC might fail to
13 properly manage this very important cost with reasonable efficiency. If anything,
14 CLECs should be able to avoid high-risk customers simply by refusing to serve
15 them.

16

17 As one indicator of bad debt, I examined CLECs for which I could find
18 uncollectibles percentages for either (or both) 2001 and 2002, one of which (2001)
19 was a recession year. From 74 observations of CLECs and ILECs, I determined
20 that the median ratio of bad debt to revenues was about 2.9 percent. The median is
21 an indicator of central tendency. The measure indicates that there are as many
22 observations above 2.9 percent as there are below 2.9 percent. This is an extremely
23 conservative indicator of the bad debt rate that an efficient CLEC should be able to

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1 attain. Indeed, one might argue that an *efficient* CLEC's rate of bad debt should be
2 in one of the lower quintiles or deciles. Nevertheless, the actual (median)
3 experience of the sample is substantially below Dr. Bryant's proposal, and more in
4 line with the 2.75 percent that I recommend.

5
6 **Q. PLEASE COMMENT ON DR. BRYANT'S ASSUMPTIONS REGARDING**
7 **DSL PENETRATION RATES.**

8
9 A. The effective proportions of CLEC business and CLEC residence customers that
10 ultimately subscribe to DSL, as computed from Dr. Bryant's model, are about 1.75
11 percent for businesses and about 2.8 percent for residences. These effective
12 penetration rates are too low to account for the customer targeting and bundling in
13 which an efficient CLEC can engage.

14
15 Such targeting appears to be occurring with real-world CLECs. According to
16 computations that I made based on DSL penetration data from Cahners In-Stat and
17 on overall line penetration data from the FCC (for approximately the same period
18 of 2001), CLECs (including IXCs) served about 15 percent of DSL lines, while
19 according to the FCC, CLECs accounted for about 9 percent of total lines. This
20 indicates *an above-average propensity for CLEC voice customers to subscribe to*
21 *DSL*. BellSouth proprietary data regarding DSL penetration for its smaller business
22 customers, which I reviewed, showed that as of August 2003, there was penetration

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Q. DOES DR. BRYANT UNDERPRICE THE ASSUMED DSL SERVICES?

16

17

A. Yes, he does. Dr. Bryant assumes that residences pay only \$19.99 extra per month

18

for DSL service from his modeled CLEC. This is not a reasonable estimate of the

19

per-customer revenues that an efficient CLEC could generate from offering

20

residential DSL services. The availability of revenue opportunities is evidenced in

21

the market. For example, my research indicates that while "lite" packages, whose

22

download speeds are on the order of 256 kbps, are available for a lower price than

23

regular speed DSL service, the regular DSL packages (whose download speeds are

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1 about 1.5 mbps) are available to residential customers for about \$40 to \$50 from a
2 variety of carriers in Alabama (including Covad TeleSurfer PLUS Residential,
3 BellSouth DSL FastAccess, and AT&T DSL).

4
5 Moreover, a DSL provider may seek to offer certain features as “add ons” to its
6 DSL offering. For example, while BellSouth’s residential “lite” DSL offering is
7 \$39.95, BellSouth also offers additional features that might interest at least some
8 DSL users. For example, BellSouth offers a home networking option (\$10.00), a
9 parental controls/firewall (\$6.95), web remote access (\$4.95), and a static IP
10 address, which may be of interest to “gamers” and SOHO businesses using virtual
11 private networks (\$14.95). While not all DSL customers will take some or all of
12 these options, some customers will take one or more. The ability to sell customers
13 additional, useful features increases the revenue opportunity, and, I understand,
14 actual revenue, from DSL service. Accordingly, Dr. Bryant’s revenue estimate for
15 DSL services is far too low, as it certainly ignores the possibility of these or other,
16 vertical revenue opportunities associated with DSL service.

17
18 Dr. Bryant assumes businesses pay \$50 extra per month for DSL service from his
19 modeled CLEC. This also appears to be low compared with market prices. For
20 example, while SOHO business DSL service is available for about \$50 from
21 BellSouth, it is also available for about \$65 from Covad and Earthlink, and for
22 substantially more (such as \$79.95 from BirchNet DSL and for \$99.95 from

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1 AccessPoint, Inc.). As I noted, Dr. Bryant also ignores additional features, such as
2 the static IP address.

3
4 Hence, my recommendation of \$47 for *à la carte* residential and SOHO business
5 customers for the BACE model is both reasonable and conservative, while Dr.
6 Bryant's proposal is unreasonably low and is not reflective of revenues available in
7 the market, as is required by the TRO. I would note that the BACE model also
8 incorporates DSL in packages and applies prices for those packages based on the
9 bundle prices currently available from CLECs in the market. Dr. Bryant does not
10 explicitly incorporate bundles into his model at all.

11
12 **Q. DO YOU AGREE WITH DR. BRYANT'S ASSUMPTIONS REGARDING**
13 **OVERALL PENETRATION?**

14
15 A. No. Dr. Bryant assumes a static CLEC market share of 5 percent. (Bryant Direct
16 p.87.) While a penetration rate of 5 percent may be reasonable for a growing
17 CLEC early in its life, it is not appropriate as an ultimate penetration rate.
18 Nevertheless, there is no way of knowing in MCI's model whether one should
19 interpret the 5 percent as the "average" penetration over an (unspecified) period of
20 time, whether it is a "steady state" ultimate penetration (and the penetration rates
21 leading up to it are ignored), whether it is the assumed penetration in the first or
22 second year of operation, or some other interpretation.

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1 A new CLEC may start with a penetration of zero, and will increase its penetration
2 over time. (Indeed, an efficient CLEC may start with a higher penetration rate if it
3 has existing UNE-P customers.) To be conservative, the BACE model explicitly
4 assumes that a CLEC starts with no customers and grows toward its ultimate
5 penetration of 15 percent (though never quite achieves it) over a ten-year period.
6 Dr. Bryant's penetration assumption could be consistent with many ultimate
7 penetration rates, including my recommended 15 percent penetration rate achieved
8 over a period of time, but these dynamics are entirely unspecified in the NRRI
9 approach. What is clear is that 5 percent is unreasonably low as an estimate of the
10 ultimate penetration rate for an efficient CLEC.

11
12 There are a number of reasons that Dr. Bryant's 5 percent market share estimate is
13 unreasonable as an ultimate penetration rate. First, as I explained in my direct
14 testimony, it has already been demonstrated that CLECs can achieve significantly
15 higher rates of penetration. AT&T has achieved 15 percent in New York, and Cox
16 Communications has achieved 19 percent penetration of the telephone-ready homes
17 in its geographic footprint around the nation, and 53 percent of its existing cable
18 TV customers in its Orange County (California) footprint.

19
20 Moreover, Dr. Bryant himself explains that UNE-L based providers will be more
21 aggressive in expanding their market shares than would UNE-P providers. As Dr.
22 Bryant explains, facilities-based CLECs are "under pressure to recover sunk costs
23 by increasing volume." (Bryant Direct 81.) Aside from "sunk cost" concerns,

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1 facilities investments create some scale economies, which induce efficient CLECs
2 to increase volume to leverage those economies of scale. Indeed, increasing its
3 customer base allows the CLEC to exploit the efficiencies available to a facilities-
4 based provider. Hence, an efficient facilities-based provider will necessarily
5 operate at a scale that exploits its scale economies in equilibrium.

6
7 Finally, in order to appropriately interpret the 15 percent penetration assumption, it
8 is useful to recall that the market share numbers reported in many public venues
9 (including the FCC reports) are at the level of large geographic areas such as an
10 entire state. A carrier that has, say, a 2 percent market share in a state would have a
11 far higher share in the specific geographic markets in which it operates. A carrier
12 that has a 5 percent share in a metropolitan area would also have a much higher
13 market share in its geographic market if it served only part of that metropolitan
14 area. The penetration rate of the BACE model applies only to the penetration of the
15 narrowly defined geographic markets in which it operates, not to the average
16 penetration of an entire state or MSA (which would obviously be lower as a
17 consequence of the markets which the CLEC does not serve).

18
19 For example, suppose a particular MSA has three zones, each with equal numbers
20 of customers. If a CLEC operates only in zone 1 and obtains 15 percent of the
21 market there, then it would be calculated to have 5 percent of the MSA. Looked at
22 differently, if carriers are observed to obtain 5 percent of an MSA, they may well

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1 be capturing a far higher percentage of the subset of the market in which they
2 operate.

3
4 **III. RESPONSE TO MR. TURNER**

5
6 **Q. WHAT COMMENTS DO YOU HAVE ON MR. TURNER'S TESTIMONY?**

7
8 A. The main comment I have is that Mr. Turner's approach, as it stands, is useless to
9 address the FCC's definition of impairment. Mr. Turner's theory of impairment
10 was considered and explicitly rejected by the FCC. Mr. Turner's approach does not
11 address the question of whether an efficient CLEC economically could enter a
12 market without access to a particular unbundled element (which is the essence of
13 the FCC's impairment definition, e.g., see TRO ¶ 84), and so it provides no
14 economically useful information to the APSC , and should be disregarded.

15
16 **Q. WHAT DO YOU MEAN THAT MR. TURNER'S APPROACH DOES NOT**
17 **ADDRESS "IMPAIRMENT"?**

18
19 A. Mr. Turner's theory of impairment is that CLECs are impaired because (he claims)
20 they have higher costs than does the ILEC. (Turner Direct 4-5.) His impairment
21 analysis computes the supposed cost disadvantages, relative to the ILEC, faced by a
22 CLEC that seeks to self-provision switching to serve mass-market customers.
23 (Turner Direct 5-7.) Cost disparities, however, are not determinative of whether

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1 entry is “economic,” which is the basis of the FCC’s definition of impairment.
2 Costs are relevant only within the context of a well-defined business case analysis
3 that evaluates whether entry by an efficient CLEC is economic, and whether
4 CLECs incur costs that are not incurred by ILECs is not determinative of
5 impairment. In fact, as the FCC recognized (TRO ¶ 112), entry by an efficient
6 CLEC may be “economic” without access to the unbundled element even when the
7 CLEC suffers from a cost disadvantages. In real markets (as well as in many
8 standard economic models of competition), firms with different costs coexist in
9 competition with one another, and such competition is sustainable and viable for
10 the firms. A sound business case analysis considers not just costs, but also the
11 revenues that an efficient CLEC reasonably could attract and, as I mentioned, any
12 countervailing advantages that the CLEC might enjoy, such as the ability to target
13 geographic areas or customers within those areas, and “second-mover” advantages
14 such as the ability to create a lower-cost network topography or use more flexible
15 or powerful switches. An approach that seeks only to demonstrate a cost
16 disadvantage cannot determine whether competitive entry is “economic” and so
17 does not address the essential issue of the FCC’s impairment definition.

18
19 As I noted, approaches such as Mr. Turner’s, which focus on absolute cost
20 disadvantages, were reviewed and rejected by the FCC during the Triennial Review
21 proceeding. The FCC concluded, “We reject the proposal to find impairment
22 whenever entrants would suffer from a substantial cost disadvantage (such as five
23 percent), regardless of whether entry is still possible.” (TRO ¶ 112.) The FCC

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1 requires that “cost factors listed should not be considered in isolation, but only in
2 the context of a broad business case analysis that examines all likely potential costs
3 and revenues.” (TRO fn. 1581. See, also fn. 1497.) The FCC specifically directs
4 states “not [to] focus on whether competitors operate under a cost disadvantage.
5 [Rather,] [s]tate commissions should determine if entry is economic by conducting
6 a business case analysis for an efficient entrant.” (TRO fn. 1579.) The FCC also
7 correctly noted that a cost disadvantage standard, such as Mr. Turner’s, would
8 focus on maximizing entry to the detriment of the other goals of the Act, such as
9 innovation, deployment of new technologies, and reduced regulation. (TRO ¶ 112.)

10
11 The Supreme Court also rejected the theory that demonstrating a cost disadvantage
12 is sufficient to prove impairment. The Court explained that a CLEC that was able
13 to operate profitably without access to an unbundled element could not argue that it
14 was impaired on the grounds that it would be even more profitable with access to
15 the element. (*AT&T et al. v. Iowa et al.* 13-14.) Nor can a CLEC claim impairment
16 by noting that its costs would increase in the absence of access to the UNE. (*AT&T*
17 *et al. v. Iowa et al.* 14) Indeed, Mr. Turner’s comments are based on an approach
18 that expressly is rejected as unreasonable by the Court. As a result, the FCC’s rules
19 were vacated by the Court, and the FCC, in the TRO, established an impairment
20 test based on the economics of entry, not on cost differentials or cost increases.

21
22 Mr. Turner admits that his analysis is not determinative of whether a CLEC has an
23 economic business case in any geographic market, and that he has not performed

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1 any analysis to determine whether it could have a positive business case.
2 Specifically, in discovery in Florida, where Mr. Turner sponsored the same
3 analysis, Mr. Turner responded with an unqualified “no” to the following question:
4 “Has any analysis, study, or evaluation been conducted by, on behalf, or at the
5 direction of AT&T to determine whether a CLEC providing a qualifying service
6 via the UNE-L can make a positive return on investment in any wire center or
7 combination of wire centers? If the answer to this Interrogatory is in the
8 affirmative, identify all documents referring or relating to such analysis, study or
9 evaluation.” (AT&T Response to BellSouth Florida Interrogatory 4-162.)
10

11 **Q. IS IT LEGITIMATE TO CONSIDER THE COSTS OF AN EFFICIENT**
12 **CLEC?**
13

14 A. Yes, it is, if these costs are considered in the proper analytical framework. As the
15 FCC explained (TRO ¶ 77), this framework is a fully developed, “net present
16 value” business case that considers revenues, as well as costs, and countervailing
17 advantages that the CLEC might enjoy. A business case evaluates the CLECs’
18 costs relative to its revenues, not relative to the ILEC’s costs. Mr. Turner’s
19 analysis is in no way a business case and therefore is not helpful to the APSC.
20

21 **IV. RESPONSE TO MR. WOOD**
22

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1 **Q. SHOULD THE APSC REJECT MR. WOOD’S PROPOSAL TO**
2 **REPUDIATE THE USE OF AN ECONOMIC IMPAIRMENT ANALYSIS**
3 **TO IDENTIFY GEOGRAPHIC MARKETS WHERE IMPAIRMENT DOES**
4 **NOT EXIST? (WOOD DIRECT 5-6.)**

5

6 A. Yes, it should reject Mr. Wood’s proposal. Mr. Wood argues that an economic
7 analysis may be useful as a way to identify factors that contribute to impairment,
8 but that the APSC should not use a business case analysis to determine whether
9 impairment exists. Mr. Wood argues that a business case analysis that does not
10 demonstrate “impairment” is inherently flawed because many CLECs have tried
11 and failed to implement UNE-L over the past 7 years. Mr. Wood therefore
12 concludes that “impairment” is obvious. I interpret this testimony to imply that Mr.
13 Wood urges the APSC to simply disregard the potential deployment component of
14 the FCC’s impairment methodology as part of its determination of the geographic
15 markets in which BellSouth can be relieved of the unbundled local switching
16 obligation, on the grounds that he already knows what the answer should be.
17 (Wood Direct 5-6.)

18

19 Clearly, this is not what the FCC appeared to have in mind when it wrote
20 51.319(d)(2)(iii)(B). This rule requires states to evaluate potential deployment as
21 part of their impairment assessments if neither switching trigger is met. The FCC’s
22 rule clearly requires a state commission to evaluate the bright-line triggers tests,
23 and then, in instances where the triggers are not met, to nevertheless find that

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1 requesting carriers are not impaired without access to the local switching UNE
2 where it finds that self-provisioning of switching is economic. As a matter of logic,
3 the fact that the FCC includes the potential deployment test must be understood to
4 imply that the FCC considers it possible to demonstrate lack of impairment thereby.
5 The FCC's rules recognize that if the triggers are not satisfied in a market, that does
6 not necessarily imply that CLECs could not economically do business there with
7 UNE-L if unbundled switching were unavailable. There is no doubt that the
8 existence of UNE-P affects the desirability and viability of pursuing a UNE-L
9 strategy.

10
11 CLECs may opt to use UNE-P rather than UNE-L when the former provides the
12 CLEC with a greater profit opportunity, or greater flexibility, than the latter.
13 However, greater (or lesser) profitability is not the standard that the FCC requires
14 for an evaluation of impairment. As I noted earlier, the FCC's standard of
15 impairment is whether an efficient CLEC could economically enter the market
16 without access to the unbundled element. (TRO ¶ 84.) The FCC's trigger's tests
17 are asymmetric tests of impairment: satisfying the triggers tests demonstrates lack
18 of impairment, but failing them does not demonstrate impairment. If there is
19 "multiple, competitive supply" (TRO fn. 283) (as indicated by the triggers tests), an
20 efficient CLEC clearly is not impaired without access to the unbundled element.
21 Thus, passing a triggers test clearly indicates that there is no impairment. But, if
22 there is not multiple, competitive supply currently in the market, this does not mean
23 that competitors would be unable to enter the market without access to the UNE.

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1 As I mentioned, CLECs might use UNE-P instead of UNE-L because it promises
2 greater profits, not because it uniquely resolves the market entry problem. As FCC
3 Chairman Powell noted, “[A]n honest inquiry into this area [of impairment analysis
4 using the triggers] must recognize what the record amply demonstrates: there is a
5 correlation between the availability of UNE-P and the failure of competitors to
6 utilize their own switching capacity.” (TRO Powell Separate Statement, page 6.)
7 A well-structured business case analysis can help identify those areas where
8 CLECs are not impaired, even when neither trigger test is satisfied.
9

10 **Q. AREN'T THE PAST 7 YEARS THEMSELVES INDICATIVE OF**
11 **IMPAIRMENT, AS CLAIMED BY MR. WOOD? (WOOD DIRECT 5-6.)**
12

13 A. No. First, Mr. Wood seems to argue that the triggers tests will demonstrate that
14 CLECs are not serving mass-market customers using their own switches. (Wood
15 Direct 5-6.) Mr. Wood’s entirely unsupported and conclusory rhetoric aside, he
16 provides no evidence that CLECs have experienced impairment in the specific
17 geographic markets that are at issue in this proceeding, and admits in discovery that
18 he performed no economic impairment analysis, study, or evaluation of impairment
19 associated with local switching. (AT&T Response to BellSouth Florida
20 Interrogatories 4-152 and 4-153.)
21

22 Second, even in those instances where the triggers are not met, CLECs are not
23 necessarily impaired, as the FCC has clearly recognized in its Rule requiring a

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1 potential deployment analysis. As I have discussed, one reason that CLECs are not
2 necessarily impaired in geographic markets where the triggers are not met is that
3 the availability of UNE-P itself affects CLECs' business decisions. The
4 availability of UNE-P where there is no impairment provides a convenience for
5 CLECs, as noted by Chairman Powell in his Separate Statement to the TRO. Even
6 when UNEs are priced based on cost, CLECs may well have the incentive to use
7 UNE-P, rather than make their own investments, even in many areas for which
8 there is no genuine impairment. Moreover, the availability of UNE-P to other
9 CLECs in areas where there is no genuine impairment damages the business cases
10 of those CLECs that otherwise would invest in their own switching. In sum, the
11 forward-looking risks and potential profits of an efficient CLEC, rather than a
12 retrospective review of CLEC successes and failures in a world of ubiquitous UNE-
13 P availability, is the relevant indicator of impairment.

14
15 **Q. IS IT TRUE, AS MR. WOOD ASSERTS, THAT "AN EFFICIENT CLEC**
16 **THAT EXPERIENCES A COST DISADVANTAGE CANNOT COMPETE**
17 **ON PRICE OVER TIME, AND THEREFORE CANNOT PRUDENTLY**
18 **INVEST IN ASSETS WHOSE COSTS CAN ONLY BE RECOVERED OVER**
19 **AN EXTENDED PERIOD OF TIME"? (WOOD DIRECT 11.)**

20
21 **A.** No. Both in theory and in fact, competition can be viable when competitors have
22 varying levels of costs, and one would be hard-pressed to explain much of the real
23 world if one insisted on a worldview that permits the survival only of competitors

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1 with identical costs. The claim that a cost disadvantage renders a firm incapable of
2 competing effectively and viably in a market is simply inconsistent with much of
3 modern economic theory, which provides a number of models in which firms with
4 different cost structures providing identical products viably coexist. The notion
5 that competition cannot accommodate heterogeneity in costs reflects a shallow
6 understanding of the richness of economic models of competition.

7
8 Moreover, efficient CLECs need not compete only on price, but can compete by
9 differentiating their products from their rivals and earn a premium from those
10 customers who value the specific product characteristics offered by the CLEC.

11
12 **Q. MR. WOOD ARGUES THAT REVENUES NEED NOT BE CONSIDERED**
13 **BECAUSE THE SAME REVENUE POTENTIAL EXISTS FOR BOTH ILEC**
14 **AND CLEC, SO THAT THE ONLY ISSUE IS COSTS. PLEASE**
15 **COMMENT. (WOOD DIRECT 11.)**

16
17 A. Mr. Wood is incorrect on at least two grounds. First, as a matter of economic
18 principle, if the revenue potential is the same for two firms, a cost difference
19 nevertheless does not necessarily render the higher cost firm uneconomic, as I just
20 explained. Second, Mr. Wood is incorrect that CLECs and ILECs necessarily face
21 the same revenue potential. One of the advantages of a CLEC is the ability to
22 target high-profit customers, and ignore unprofitable ones. My own analysis
23 indicates that this “cream skimming” is occurring in the BellSouth-served

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1 territories. Mr. Wood’s entire approach, besides being rejected as probative by the
2 FCC, is based on a flawed premise.
3

4 **V. RESPONSE TO MR. GILLAN**

5
6 **Q. PLEASE COMMENT ON MR. GILLAN’S ASSERTION THAT ABOUT 90**
7 **PERCENT OF THE UNE-BASED LOCAL COMPETITION IN ALABAMA**
8 **IS “DEPENDENT UPON UNE-P.” (GILLAN DIRECT 9.)**
9

10 A. Mr. Gillan presumes the outcome of this proceeding. The purpose of this
11 proceeding is to determine those markets in which an efficient CLEC, executing the
12 most efficient business model, could economically enter and serve a particular
13 market *without access to unbundled local switching*. In instances where this occurs
14 (as in the case of the triggers tests) or where it is likely to be economic (in the case
15 of the potential deployment test), the efficient CLEC is not “dependent upon UNE-
16 P.” Mr. Gillan seems to be arguing that all of the lines thus far served by UNE-P-
17 based CLECs in areas where there is no genuine impairment would not be served
18 by switch-based CLECs. That is simply unfounded speculation on his part.
19

20 **Q. DOES MR. GILLAN ARGUE THAT THE APSC SHOULD NOT REMOVE**
21 **A NETWORK ELEMENT BASED ON A POTENTIAL DEPLOYMENT**
22 **ANALYSIS? (GILLAN DIRECT 18.)**
23

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1 A. Yes, I believe he does. Like Mr. Wood, Mr. Gillan argues that a potential
2 deployment analysis can indicate why impairment exists, but that it would not be
3 “reasonable” for the APSC to remove a network element unbundling requirement
4 based on a potential deployment analysis. (Gillan Direct 18.) Hence, like Mr.
5 Wood, Mr. Gillan would have the APSC ignore the plain language of the federal
6 rules. I believe that this is misguided for the reasons I discussed in my response to
7 Mr. Wood’s recommendation. Nothing in the FCC’s discussion or its rules even
8 hints at this ill-conceived proposal. Rather, the FCC is very explicit that states
9 must first examine the bright-line triggers tests and then they must consider
10 whether an efficient CLEC could economically provide mass-market service
11 without access to the unbundled switching UNE. This is one way of addressing
12 Chairman Powell’s concern that CLECs use UNE-P even in instances where there
13 is no genuine impairment. Mr. Gillan’s undisciplined advocacy should be rejected.

14
15 **Q. MR. GILLAN ARGUES THAT UNE-P ENCOURAGES INVESTMENT.**
16 **(GILLAN DIRECT 55-57.) PLEASE COMMENT.**

17
18 A. Mr. Gillan’s opinions and conjecture on this are irrelevant to any determination of
19 “impairment” under the FCC’s rules. The FCC clearly states that facilities-based
20 competition serves the public policy goal of innovation. (TRO fn. 233.) Moreover,
21 removal of unbundling obligations is not optional if the impairment test fails. It is
22 mandatory. The public policy considerations weighing any pros and cons of
23 unbundling already are incorporated in the provisions of the Act itself.

PUBLIC VERSION

1

2 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

3

4 **A. Yes it does.**

ADDITIONAL UNIMPAIRED MARKETS IN ALABAMA			
UNE Zone	CEA	Net Present Value	NPV for Mass Market
Zone1	Anniston AL	1,224,667	749,969
Zone1	Columbus GA-AL	1,247,780	934,914
Zone1	Decatur AL	3,011,000	1,802,236
Zone1	Florence AL	1,273,369	844,294
Zone1	Gadsden AL	1,240,307	745,483
Zone1	Mobile AL	12,262,409	7,566,920
Zone1	Tuscaloosa AL	3,052,142	1,893,086
Zone2	Anniston AL	1,286,992	885,257
Zone2	Birmingham AL	3,359,483	2,542,790
Zone2	Columbus GA-AL	411,378	762,327
Zone2	Decatur AL	366,862	303,468
Zone2	Dothan AL-FL-GA	337,582	274,578
Zone2	Florence AL	848,630	539,881
Zone2	Gadsden AL	531,220	495,210
Zone2	Huntsville AL-TN	924,570	1,025,255
Zone2	Mobile AL	1,072,502	864,294
Zone2	Montgomery AL	2,713,600	1,930,374
Zone2	Tuscaloosa AL	788,648	520,536
	TOTAL:	35,953,138	24,680,873
OTHER UNIMPAIRED MARKETS IN ALABAMA			
Zone1	Birmingham AL	29,757,057	18,500,971
Zone1	Huntsville AL-TN	5,677,996	3,753,499
Zone1	Montgomery AL	7,817,056	4,577,686
	TOTAL:	43,252,109	26,832,157

CUSTOMER ACQUISITION ("SALES") COSTS OF AT&T AND OF CLPS THAT MARKET TO MASS-MARKET CUSTOMERS		
	Source	
Z-Tel (Management target)	(1) (2)	\$50
Z-Tel (Actual 2001 Q2)	(2)	\$60 - \$70
Z-Tel (Actual 2001 Q3)	(1)	\$100 \$120
Z-Tel (Actual 2001 Q4)	(3)	\$60
Talk America (Estimate of actual experience)	(4)	\$80
AT&T (Estimate of actual experience)	(5)	\$125
Sources:		
(1) James J. Linnehan, "Z-Tel Technologies, Inc – Market Perform.: Still Chugging Along," Thomas Weisel Partners Merchant Banking, November 8, 2001, p. 3. (This figure excludes television advertising.)		
(2) James J. Linnehan, "Z-Tel Technologies, Inc. – Market Perform," Thomas Weisel Partners Merchant Banking, August 13, 2001 p. 3.		
(3) Gregory Smith, CEO and Chairman of Z-Tel, Transcript of Z-Tel Fourth Quarter 2001 Earnings Results conference call by Fair Disclosure Financial Network, February 28, 2002.		
(4) Vik Grover, "Raising Numbers Again," Kaufman Bros. Equity Research (KBRO Kaufman Bros. L.P.), April 30, 2003, p. 1. See, also, Josephine Shea, "Talk America Holdings, Inc." Morgan Joseph High Yield Research, May 27, 2003, p. 1.		
(5) David W. Barden, "AT&T Corporation: A Case for Consumer Services," Banc of America Securities—United States Equity Research, April 30, 2003, p. 20.		

IMPLICATION OF ESTIMATED PER LINE SALES EXPENSES FOR THE BACE MODEL BUSINESS CUSTOMER SEGMENTS				
	BACE Estimate (per Line)	Company and Per Line Sales Expense		
		Mpower	ChoiceOne	Allegiance
SOHO	\$257	N/A	N/A	N/A
SME/A	\$282	N/A	N/A	N/A
SME/B	\$221	N/A	N/A	N/A
SME/C	\$191	N/A	N/A	N/A
Average	N/A	\$309-343	\$170	\$188
Notes and Sources: <u>Mpower</u> estimate is based on company's reported customer acquisition costs and LECG estimate of gross line additions (i.e., gross adds = net adds + (avg. lines * 2% monthly churn rate)). <u>ChoiceOne</u> estimate is Steve Dubnik, Chairman and CEO "Choice One Communications Q1 2002 Earnings Call," Fair Disclosure Financial Network, May 9, 2002, p. 8. (transcript). <u>Allegiance</u> is estimated as 30% of SG&A expenses / estimated gross line adds (net adds + (avg. lines * 2% monthly churn rate)), where the 30% is estimated based on Peter DiCaprio <i>et al.</i> , "Allegiance Telecom, Inc. – Q4 Preview - Operating Leverage Cometh" Thomas Weisel Partners Report, February 19, 2002, p. 7.				